August 31, 2016

Ashley Peters
Central Valley Regional Water Quality Control Board
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Rancho Cordova, CA 95670-6114
Sent via email to Ashley.Peters@waterboards.ca.gov

Re: Daft Management Practices Evaluation Program Work Plan for the East San Joaquin Water Quality Coalition, et.al.

Dear Ms. Peters,

We thank you for the opportunity to comment on the draft Management Practices Evaluation Program Work Plan (MPEP) for the East San Joaquin Water Quality Coalition, Sacramento Valley Water Quality Coalition, San Joaquin County and Delta Water Quality Coalition, Westlands Water Quality Coalition, and Westside San Joaquin River Watershed Coalition (hereinafter "Coalitions"). Our organizations are very interested in the successful implementation of this program, as we have been repeatedly assured by members of various coalitions that this effort is key to meeting the requirements of the order. However, the level of detail in the Plan does not persuade us that it will do so. Our comments are therefore posed as a series of questions in an attempt to understand how this program will achieve compliance with receiving water limitations.

How will practice effectiveness be evaluated at a site-specific level?
The monitoring and reporting plan for this order lays out a series of questions developed by the Groundwater Monitoring Advisory Workgroup. One of the questions to be answered by the MPEP is "Which irrigated agricultural management practices are protective of groundwater quality and to what extent is that determination affected by site conditions (e.g., depth to groundwater, soil type, and recharge)?"

We appreciate that the pilot studies identified in this plan are located in Hydrologically Vulnerable Areas. However, the results of those pilots will then have to be applied in other regions which may not share the same characteristics. A practice that meets Receiving Water Limitations in one region will not have the same results everywhere.

The MPEP must identify what additional steps may be necessary to meet the goals of the Plan at the local level. Each area, depending on a number of factors such as soil type and climate, will likely need a different set of tools and practices in order to meet receiving water limitations. Individual MPEPs are supposed to look into both commonly used best management practices and more innovative practices in order to determine what practices are the best fit for each area to inform management practices and inform an improved GQMP.

What will members be required to implement?

Section IV.B.21 of the order states that "Members shall implement the applicable management practices, or equivalent practices, identified as protective of groundwater in the Management Practices Evaluation Report." How will the determination be made of which practices are applicable? How will "equivalent" practices be evaluated? If a study evaluates a suite of four practices and the grower implements only two, is that member subject to enforcement action? If a study recommends a fertigation process that doesn't work for an organic grower, how does that member demonstrate equivalence? Please provide additional information about how members will be asked to implement the recommendations of the MPEP and what justification will be required from members who choose to adopt other practices or none at all.

How will practices be chosen for investigation?

According to the order (Attachment A) "The purpose of the MPEP is to identify whether existing site-specific and/or commodity-specific agricultural management practices are protective of groundwater quality in the high vulnerability areas and to assess the effectiveness of any newly implemented management practices instituted to improve groundwater quality." While we understand that the literature search is still underway, we note that the first study under the MPEP, the walnut study partially funded by FREP, is already underway and is summarized in Appendix A. However, the management practices to be studied are not included in the Appendix, pending identification of a "cooperator." This is concerning, as we anticipated that practices would be chosen according to their potential efficacy in protecting water quality. We strongly recommend that a list of practices to be studied – at least in the study already underway - be included in the final plan.

The Executive Summary states that "It is unknown at this time if commonly used management practices can help completely prevent, or minimize, nitrogen in organic and synthetic fertilizers from transforming to nitrates that then reach the groundwater." This is not true. While true that practices have not prevented leaching, practices already exist which are known reduce nitrate loading to groundwater. The Plan itself acknowledges this in later sections.

We are very interested in the selection of practices to be studied because we don't want this long MPEP implementation plan to result in telling us what we already know (albeit with more detail) rather than in identifying new or adjusted practices that have the potential to greatly reduce loading to groundwater when applied on a regional basis We would also like to understand if and how the literature review will be updated during the plan's duration to allow for the inclusion of new practices into the program.

How will the MPEP measure impacts to receiving waters?

The goal of the MPEP is to determine which management practices are sufficiently protective of groundwater to allow members to meet receiving water limitations. The MPEP must clearly define the methodology they will use to measure nutrient loading to the basin and compliance with receiving water limitations. This methodology must then be applied to crops (both in field studies and through modeling) and evaluated to determine the effectiveness of the methodology and components thereof with respect to nitrogen loading and groundwater protection. However, the MPEP's Work Plan lacks clear metrics as to how management practices will be determined and evaluated. Metrics must be quantitative and verifiable to ensure practices are protective of water quality and able to meet receiving water limitations. A management practice which results in exceedances of receiving water limitations is not protective of groundwater. Without numeric metrics it is impossible to determine the extent to which a management practice does or does not meet receiving water limitations.

Is this plan of sufficient scope and urgency?

Because of the lack detail in the plan, it is difficult to understand whether the level of study contemplated by the plan is sufficient to address those crops that have the greatest potential for nitrogen loading to groundwater, and whether this plan will be implemented with sufficient alacrity to ensure best practices identified are adopted in a timely fashion. According to the timeline, four studies will be conducted between now and 2020; however, since we don't know the breadth of practices that will be investigated, we have now way of knowing whether these studies are adequate, or whether we will be left at the end of the study period with a set of practices that fail to meet receiving water limitations. Conversely, if protective practices are identified, it is not clear how quickly implementation can be achieved by members. Until successful implementation occurs, this program will provide no water quality protection.

How will the cost of implementing a practice be balanced against its water quality benefit?

The Order does not require an MPEP to include any sort of cost-benefit analysis. Rather, the MPEP is instructed to answer the question "How can we confirm that management practices implemented to improve groundwater quality are effective?" The Coalition's MPEP Work Plan includes a CURES research project which discusses a cost-benefit analysis for the practices being studied. While we perfectly understand that growers will more readily adopt practices that save money or have a minimal cost, the CURES project addresses the proposed costs and benefits unequally. The proposal discusses in detail how costs to farmers will be determined. However, when discussing the benefits to groundwater, the proposal merely states, "[the] benefit of protecting groundwater will be estimated." This creates uncertainty as to how benefits to groundwater protection will be evaluated. What metrics will be used? Will the researchers cap the benefit at a certain loading amount? Will they take into consideration the additional costs

borne by water systems and their ratepayers for contaminated drinking water sources? Will the cost to farmers and other current and future parties for replacement water to impacted residents be incorporated? There are a wide range of benefits to groundwater and costs to other beneficial users of groundwater not identified in this analysis.

In addition to the unequal level of analysis, we are concerned that application of this tool may lead to promising practices not receiving adequate evaluation. But in areas struggling to meet water quality objectives, more costly measures may be needed. This document should provide greater information about how this information will be used.

How will the Regional Board evaluate this Plan based upon its impacts to the Human Right to Water

In February the State Water Board passed a resolution adopting the Human Right to Water as a core value that must be considered in all decision-making activities (Resolution 2016-0010). In April the Central Valley Regional Water Board followed suit and adopted their own similar resolution (Resolution R5-2016-0018). Nitrates are an acute contaminant which pose a serious public health risk, particularly when found in drinking water supplies. Improperly managed nitrate application can result in leaching to groundwater supplies that many communities depend upon for their everyday needs. As the Regional Board evaluates the adequacy of the MPEP and other documents required under the ILRP, staff must ensure they are presented with adequate data and information from the Coalitions er to make a determination of whether the plans will result in the achievement of the Human Right to Water for all residents impacted by the project area's activities.

We look forward to working with you in future and for thank you for providing us the opportunity to comment on this document.

Sincerely,

Phoebe Seaton
Executive Director
Leadership Counsel for Justice and Accountability

Laurel Firestone
Co-Executive Director and Attorney at Law
Community Water Center

Jennifer Clary
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Clean Water Action

CC: Parry Klassen
Members, Central Valley Water Quality Control Board

Darrin Polhemus, Deputy Director, Division of Administrative Services, State Water Board